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Scientific Note

AN UNUSUAL HOST RECORD FOR *IMATIDIUM* AND NEW DISTRIBUTIONAL RECORDS FOR *I. RUFIVENTRE* BOHEMAN AND *I. THORACICUM* FABRICIUS (COLEOPTERA: CHRYSOMELIDAE: HISPINAE: CEPHALOLEIINI)

During August of 1998 two of the authors spent about a week collecting at Yasuni Scientific Research Station in the Orientale (Amazon) region of Ecuador. At the end of the final day of the trip a few specimens of *Imatidium* were collected sweeping *Inga marginata* Willd. (Fabaceae). This beetle was subsequently identified as *Imatidium rufiventre* Boh. by the authors. The trees are growing along the dirt road leading into the research station; they appear to have been planted in the open areas along the road. In an attempt to collect a series of this insect, a visual search of the trees was made. During this visual search one unknown larva and two pupae were collected adhering to the upper surface of the leaves (Fig. 1). These were photographed and placed into a dry container with the hope that one would develop to the adult stage. Also during this visual search it was noted that scattered throughout the trees were pairs of leaves held together with about one-third of the bottom of one leaf over-lapping the top of another leaf. In a significant number of cases (probably 70 percent or more), when the two leaves were separated, an adult specimen of *Imatidium* was found, along with fresh feeding damage (Fig. 1). The feeding damage was an unorganized array of short lines on the top of the bottom leaf, extending to the margins of the leaf over-lap. A total of 21 adult specimens were collected in this manner from *Inga marginata*. Eight adult specimens of the same species were collected individually from *Heliconia* during our stay at Yasuni.

Over the next two weeks the immature specimens were checked periodically. During the latter part of the second week an adult specimen of *Imatidium* was observed crawling around in the container. The adult was removed and preserved along with the old pupal case. The other two immature specimens did not survive. This may be the first collection of the immature stages of this beetle. The larvae are evidently free-living on the upper and lower surfaces of the leaf, unprotected by any exuvial or fecal shield. Pupae live unprotected on the upper surface of the leaf and the adults live protected between the leaves.

Species of the genus *Imatidium* have been reported feeding on *Calathea insignis* Hort. & Ball. (Marantaceae) (Spaeth, F. 1938. Revista de Entomologia, 9: 305–317) and on *Heliconia latispatha* Bentham (Heliconiaceae) in Panama (Windsor, D. M., E. G. Riley & H. P. Stockwell. 1992. pp. 372–391. *In* D. Quintero & A. Aiello (eds.). Insects of Panama and Mesoamerica. Oxford Univ. Press, Oxford.). Fabaceae are not recorded as a host for any other cassidoid Hispinae in Costa Rica (Flowers, R. W. & D. H. Janzen. 1997. Florida Entomologist, 80: 334–366) or in Panama (Windsor, D. M., E. G. Riley & H. P. Stockwell. 1992). Of the Neotropical cassidoid Hispinae, only *Hemisphaerota* Chev. has been recorded from *Inga*, and this was considered accidental (Jolivet, P., & T. J. Haw-

Figure 1. Immature specimens of *Imatidium rufiventre* Boh. and adult feeding damage (center, between the immature specimens).

keswood. 1995. Host-Plants of Chrysomelidae of the World. An Essay about the Relationships between the Leaf beetles and their Food-plants. Backhuys, Leiden, 281 pp.). Only a few specimens of true cassidoids have been collected or reported from Fabaceae genera, and these were all described as probably accidental or erroneous reports. The Fabaceae, and *Inga* specifically, is recorded as host for many Neotropical non-cassidoid hispine genera. The collection of three life stages, observation of feeding damage and the large number of adults collected confirms *Inga marginata* as a host for *I. rufiventre.*

During previous trips to Central America, the authors collected single specimens of *I. rufiventre* in Costa Rica and Panama. The Costa Rica collection from 5 km. N of Pavones (Puntarenas Province) is a new record for Costa Rica and range extension for this species, previously reported from Panama and South America (Windsor, D. M., E. G. Riley & H. P. Stockwell. 1992). *Imatidium thoracicum* Fab. is reported for the first time from Costa Rica (5 km. N of Pavones and La Selva Biological Station). This species has been previously reported from Nicaragua (Staines, C. L. 1996. Revista Nicaraguense de Entomologia, 37/38: 1–65), Panama and South America (Windsor, D. M., E. G. Riley & H. P. Stockwell. 1992).

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